

Abstract

The present invention relates to a generative method of fabrication and an accompanying device with which components can be fabricated from a combination of materials. The device comprises a bottom surface (1) with a lowerable building platform (2), a leveling mechanism (5) for leveling a first material (4) in a processing plane (3) above the building platform (2), a laser beam source for emitting a laser beam (11), a processing unit (6) with a focusing optical system (8) for focusing the laser beam (11) onto the processing plane (3) and a positioning mechanism which can position the processing unit (6) in any desired positions in a plane parallel to the processing plane (3) above the component (14). Furthermore, the device is provided with a suction device (10) for suctioning off the material from the processing plane (3) and an introduction mechanism (9) for a second material (12) with which the latter is brought into the focal range of the laser beam (11).

This device permits fabrication of components of any desired complexity and adapted to a certain function, in which individual regions can be made of a second, harder material to increase sturdiness or to improve wear-resistance.

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